Windbreak Interpretations

Farmstead windbreaks protect livestock, buildings, and yards from wind and snow. They also protect fruit trees and gardens, and they furnish habitat for wildlife. Several rows of low-growing and high-growing broadleaf and coniferous trees and shrubs provide the most protection.

Field windbreaks are narrow plantings made at right angles to the prevailing wind and at specific intervals across the field. The interval depends on the erodibility of the soil. Field windbreaks protect cropland and crops from wind, help to keep snow on the fields, increase crop yields, and provide food and cover for wildlife.

Each tree or shrub species has certain climatic and physiographic limits. Within these parameters a tree or shrub may be well or poorly suited because of soil characteristics. Each tree or shrub also has definable potentials of height growth based on the soil type and climate.

Information in this subsection, which includes windbreak suitability groups and a windbreak and environmental plantings table, can be used as a guide in planning windbreaks and screens.

This subsection includes:

• (a) Trees and Shrubs for Windbreak and Environmental Plantings

Map symbol	Trees having predicted 20-year average height, in feet, of					
and soil name	<8	8-15 	16-25	26-35	>35	
1B: MARSHALL	 	 	 	 	 	
1B2: MARSHALL	 fragrant sumac 	 American plum; gray dogwood; southern arrowwood	 eastern redbud; eastern redcedar; washington hawthorn	green ash; northern red oak; tuliptree; white fir	 eastern white pine 	
1C: MARSHALL	 	 	 		 	
1C2: MARSHALL	 fragrant sumac 	American plum; gray dogwood; southern arrowwood	 eastern redbud; eastern redcedar; Washington hawthorn	green ash; northern red oak; tuliptree; white fir	 eastern white pine 	
1D2: MARSHALL	 fragrant sumac 	American plum; gray dogwood; southern arrowwood	 eastern redbud; eastern redcedar; Washington hawthorn	green ash; northern red oak; tuliptree; white fir	 eastern white pine 	
2D: CONTRARY	 fragrant sumac 	American plum; gray dogwood; southern arrowwood	 eastern redbud; eastern redcedar; Washington hawthorn	green ash; northern red oak; tuliptree; white fir	 eastern white pine 	
3C2: HIGGINSVILLE	 American plum; fragrant sumac 	 blackhaw; gray dogwood 	 eastern redcedar; nannyberry; washington hawthorn	 baldcypress; green ash; sweetgum	 eastern white pine; pin oak	
3D2: HIGGINSVILLE	 American plum; fragrant sumac 	 blackhaw; gray dogwood 	 eastern redcedar; nannyberry; Washington hawthorn	 baldcypress; green ash; sweetgum 	eastern white pine; pin oak	

Map symbol	Trees having predicted 20-year average height, in feet, of				
and soil name	<8	8-15	16-25	26-35	>35
4C: KNOX	 fragrant sumac 	 American plum; gray dogwood; southern arrowwood	 eastern redbud; eastern redcedar; Washington hawthorn	green ash; northern red oak; tuliptree; white fir	eastern white pine
4C2: KNOX	 fragrant sumac 	 American plum; gray dogwood; southern arrowwood	 eastern redbud; eastern redcedar; Washington hawthorn	green ash; northern red oak; tuliptree; white fir	eastern white pine
4D2: KNOX	 fragrant sumac 	American plum; gray dogwood; southern arrowwood	 eastern redbud; eastern redcedar; Washington hawthorn	green ash; northern red oak; tuliptree; white fir	eastern white pine
4D3: KNOX	 fragrant sumac 	 American plum; gray dogwood; southern arrowwood	 eastern redbud; eastern redcedar; Washington hawthorn	green ash; northern red oak; tuliptree; white fir	eastern white pine
4E3: KNOX	 fragrant sumac 	 American plum; gray dogwood; southern arrowwood	 eastern redbud; eastern redcedar; Washington hawthorn	green ash; northern red oak; tuliptree; white fir	eastern white pine
4F: KNOX	 fragrant sumac 	 American plum; gray dogwood; southern arrowwood	 eastern redbud; eastern redcedar; Washington hawthorn	green ash; northern red oak; tuliptree; white fir	eastern white pine
7B2: SHARPSBURG	 fragrant sumac 	 American plum; gray dogwood; southern arrowwood	 eastern redbud; eastern redcedar; Washington hawthorn	green ash; northern red oak; tuliptree; white fir	eastern white pine
7C2: SHARPSBURG	 fragrant sumac 	 American plum; gray dogwood; southern arrowwood	 eastern redbud; eastern redcedar; Washington hawthorn	green ash; northern red oak; tuliptree; white fir	eastern white pine

Map symbol	Trees having predicted 20-year average height, in feet, of					
and soil name	<8	8-15	16-25	26-35	>35	
7D2: SHARPSBURG	 fragrant sumac	 American plum; gray dogwood; southern arrowwood	 eastern redbud; eastern redcedar; Washington hawthorn	green ash; northern red oak; tuliptree; white fir	 eastern white pine 	
11B: SIBLEY	 fragrant sumac 	American plum; gray dogwood; southern arrowwood	 eastern redbud; eastern redcedar; Washington hawthorn	green ash; northern red oak; tuliptree; white fir	eastern white pine	
21B: JUDSON	 fragrant sumac 	American plum; gray dogwood; southern arrowwood	 eastern redbud; eastern redcedar; Washington hawthorn	green ash; northern red oak; tuliptree; white fir	 eastern white pine 	
COLO	 	 			 	
22A: WIOTA	 fragrant sumac 	 American plum; gray dogwood; southern arrowwood	 eastern redbud; eastern redcedar; Washington hawthorn	green ash; northern red oak; tuliptree; white fir	 eastern white pine 	
25F: GOSPORT	 	 	 	 	 	
29F: GASCONADE	 	 	 	 	 	
31D: ARMSTER	 fragrant sumac 	American plum; gray dogwood; southern arrowwood	 eastern redbud; eastern redcedar; Washington hawthorn	green ash; northern red oak; tuliptree; white fir	eastern white pine	
33D2: ARMSTRONG	 fragrant sumac; ninebark 	 Amur maple; gray dogwood; possumhaw 	 eastern redcedar 	Austrian pine; common hackberry; honeylocust; Norway spruce; pin oak	 	

Map symbol	Trees having predicted 20-year average height, in feet, of					
and soil name	<8	8-15	16-25	26-35	>35	
42C2: LAMONI	 	 	 	 	 	
42D2: LAMONI	 	 	 	 	 	
44D2: SHELBY	 fragrant sumac 	American plum; gray dogwood; southern arrowwood	 eastern redbud; eastern redcedar; Washington hawthorn	green ash; northern red oak; tuliptree; white fir	 eastern white pine 	
52: KENNEBEC	 American plum; fragrant sumac	 blackhaw; gray dogwood 	 eastern redcedar; nannyberry; Washington hawthorn	 baldcypress; green ash; sweetgum 	 eastern white pine; pin oak	
53B: JUDSON	 fragrant sumac 	American plum; gray dogwood; southern arrowwood	 eastern redbud; eastern redcedar; Washington hawthorn	 green ash; northern red oak; tuliptree; white fir	 eastern white pine 	
54C: OLMITZ	 fragrant sumac 	 American plum; gray dogwood; southern arrowwood	 eastern redbud; eastern redcedar; Washington hawthorn	green ash; northern red oak; tuliptree; white fir	 eastern white pine 	
55: COLO						
56: ZOOK						
57: WABASH	 buttonbush 	 possumhaw 	 eastern arborvitae; eastern redcedar; nannyberry	 baldcypress; common hackberry; pin oak 	 eastern cottonwood 	

Map symbol	Trees having predicted 20-year average height, in feet, of					
and soil name		8-15	16-25 	26-35	>35	
58: WALDRON	 	 	 	 	 	
60: COLO		 	 		 	
61: NODAWAY		 	 	 	 	
64B: SARPY	American plum; common lilac; fragrant sumac; gray dogwood	 autumn olive; Washington hawthorn 	 blackjack oak; diospyros; eastern redcedar; jack pine	eastern cottonwood	 	
66: HAYNIE	 	 	 	 	 	
70: MODALE	 American plum; blackhaw 	 possumhaw 	eastern arborvitae; eastern redcedar; nannyberry; Washington hawthorn; white spruce	 bur oak; common hackberry; green ash	 	
74: PERCIVAL	 American plum; blackhaw 	possumhaw	eastern arborvitae; eastern redcedar; nannyberry; Washington hawthorn; white spruce	 bur oak; common hackberry; green ash	 	
77: DOCKERY	 	 	 	 	 	
79: ONAWA		 	 		 	

Map symbol	Trees having predicted 20-year average height, in feet, of						
and soil name	<8	8-15	16-25	26-35	>35		
81: ALBATON	 	 possumhaw; pussy willow	 eastern arborvitae; eastern redcedar	black willow; common hackberry; honeylocust			
83: LEVASY	 American plum; buttonbush	 possumhaw; pussy willow	 eastern arborvitae; eastern redcedar	black willow; common hackberry; honeylocust			
93: GRABLE	 		 				
98: UDIFLUVENTS	 		 				
WATER							
99: PITS	 	 	 	 			
101: KENMOOR	 American plum; blackhaw 	 possumhaw 	eastern arborvitae; eastern redcedar; nannyberry; Washington hawthorn; white spruce	bur oak; common hackberry; green ash			
102: HAYNIE	 		 				
ONAWA							

Map symbol and soil name	Trees having predicted 20-year average height, in feet, of					
	<8	8-15	16-25	26-35	>35	
104E: KNOX	fragrant sumac	American plum; gray dogwood; southern arrowwood	 eastern redbud; eastern redcedar; Washington hawthorn	green ash; northern red oak; tuliptree; white fir		
URBAN LAND	 			 		
104F: KNOX	fragrant sumac	American plum; gray dogwood; southern arrowwood	 eastern redbud; eastern redcedar; Washington hawthorn	green ash; northern red oak; tuliptree; white fir	 eastern white pine 	
URBAN LAND						
105C: MARSHALL			 	 		
URBAN LAND				 		
105E: MARSHALL			 	 	 	
URBAN LAND	 	 	 	 	 	
106A: URBAN LAND			 	 		
229F: GOSPORT						
GASCONADE	 			 		
M-W: WATER	 		 	 	 	
W: WATER	 		 		 	